

Claims

1. A lever configured to mate with a knob having a pocket that includes at least one inner peripheral surface, said lever comprising:

a first end for engaging and supporting the knob, said first end having a resiliently deflectable retaining member that engages at least one inner peripheral surface of the knob pocket to retain the knob on said lever;

a second end configured for connection to a lever-actuated device; and  
a longitudinal axis.

2. A lever as recited in claim 1, wherein said retaining member is integrally formed with said lever.

3. A lever as recited in claim 1, wherein said retaining member exhibits a substantially arched profile defining a first half that extends upward from said lever and a second half comprising a resilient tine that extends downwardly from said first end.

4. A lever as recited in claim 3, wherein said tine deflects inwardly towards said longitudinal axis upon installation of the knob.

5. A lever as recited in claim 4, wherein a spring force generated by said deflected tine causes said retaining member to exert oppositely directed forces against the inner peripheral surface of the knob pocket.

6. A lever as recited in claim 3, wherein said tine includes a sharply pointed tip.

7. A lever as recited in claim 6, wherein said tip is imbedded into the inner peripheral surface of the knob pocket upon installation of the knob.

8. A lever as recited in claim 1, wherein said lever comprises a material that is relatively harder than the knob.

9. A lever as recited in claim 1, wherein said lever comprises a metal.

10. An actuation lever for operating a vehicle climate control unit, said actuation lever comprising:

a knob that includes a pocket having at least one inner peripheral surface;

a lever having a first end for engaging and supporting said knob, a second end configured for connection to the climate control unit and a longitudinal axis, said first end having a resiliently deflectable retaining member that engages at least one inner peripheral surface of said knob pocket to retain said knob on said lever.

11. An actuation lever as recited in claim 10, wherein said retaining member is integrally formed with said lever.

12. An actuation lever as recited in claim 10, wherein said retaining member exhibits a substantially arched profile defining a first half that extends upward from said lever and a second half comprising a deflectable tine that extends downwardly from said first end.

13. An actuation lever as recited in claim 12, wherein said tine deflects inwardly towards said longitudinal axis upon installation of said knob.

14. An actuation lever as recited in claim 13, wherein a spring force generated by said deflected tine causes said retaining member to exert oppositely directed forces against at least one inner peripheral surface.

15. An actuation lever as recited in claim 12, wherein said tine includes a sharply pointed tip.

16. An actuation lever as recited in claim 15, wherein said tip is imbedded into an inner peripheral surface of said knob pocket upon installation of said knob.

17. An actuation lever as recited in claim 10, wherein said knob comprises a polymeric material and said lever comprises a metal.

18. An actuation lever as recited in claim 10, wherein the force to apply said knob onto said lever does not exceed approximately 50 N.

19. An actuation lever as recited in claim 10, wherein the force to remove said knob from said lever is at least approximately 20 N.

20. An actuation lever for operating a vehicle climate control unit, said actuation lever comprising:

a knob that includes a pocket having at least one inner peripheral surface;

a lever having a first end for engaging and supporting said knob, a second end configured for connection to the climate control unit and a longitudinal axis, said first end having a resiliently deflectable retaining member that engages at least one inner peripheral surface of said knob pocket to retain said knob on said lever; and

wherein said retaining member exhibits a substantially arched profile defining a first half that extends upward from said lever and a second half comprising a deflectable tine that extends downwardly from said first end to a tip, said tine deflecting inwardly towards said longitudinal axis upon installation of said knob, and said tip imbedding into an inner peripheral surface of said knob pocket upon installation of said knob.